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AMSAT NEWS SERVICE
ANS-317

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to: ans-editor [at] amsat.org

You can sign up for free e-mail delivery of the AMSAT News Service Bulletins via the ANS List; to join this list see: https://mailman.amsat.org/postorius/lists/ans.amsat.org/

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ANS-317 AMSAT News Service Weekly Bulletins

To: All RADIO AMATEURS
From: Radio Amateur Satellite Corporation
712 H Street NE, Suite 1653
Washington, DC 20002

DATE 2022 Nov 13

CAS-10 Launched to Chinese Space Station

CAMSAT's CAS-10 (XW-4) satellite was launched on November 12, 2022, carried on the Tianzhou 5 cargo spacecraft to the Chinese Space Station. Deployment from the Chinese Space Station is expected on or about December 15th. The satellite will be active immediately upon deployment into its own 400 km orbit with an inclination of 42.9 degrees.

CAS 10 is an 8U CubeSat approx 228x455x100mm with 12kg Mass. A follow on mission from CAS-9 and also known as Hope-4 (XW-4) Carrying a V/U Mode Linear Transponder, a UHF – CW Telemetry Beacon, a UHF – AX.25 4.8k/9.6kbps GMSK Telemetry downlink and a space camera.

CAS-10 carries a VHF uplink and UHF downlink linear transponder with a bandwidth of 30kHz. This transponder will work all day during the life cycle of the satellite, and amateur radio enthusiasts around the globe can use it for two-way radio relay communications.
CAS-10 carries a camera, and the pictures it takes are stored in the flash memory on the satellite, we have designed a simple remote control system

based on DTMF, and amateur radio enthusiasts around the globe can send DTMF commands to download the camera photos.
CW beacon uses Morse code to send satellite telemetry data, which is also a feature that is widely welcomed by amateur radio enthusiasts.

Downlink frequencies for VHF/UHF linear transponder 435.180 MHz, for UHF CW telemetry beacon 435.575 MHz and for telemetry 435.725 MHz. Also an uplink for the transponder 145.870 MHz have been coordinated.

[ANS thanks Alan Kung, BA1DU, CAMSAT, for the above information]

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[ANS thanks NASA for the above information]

Changes to the AMSAT TLE Distribution for November 10, 2022

Two Line Elements or TLEs, often referred to as Keplerian elements or keps in the amateur community, are the inputs to the SGP4 standard mathematical model of spacecraft orbits used by most amateur tracking programs. Weekly updates are completely adequate for most amateur satellites. TLE bulletin files are updated Thursday evenings around 2300 UTC, or more frequently if new high interest satellites are launched. More information may be found at https://www.amsat.org/keplerian-elements-resources/

Due to the impending installation and activation of amateur radio equipment aboard the Chinese Space Station, as well as the deployment of CAS-10, the Chinese Space Station (NORAD ID 48274) has been added to the AMSAT TLE distribution as "CSS"

[ANS thanks Ray Hoad, WA5QGD, AMSAT Orbital Elements Manager for the above information]

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18:00 UTC. ON Nov. 18 about 18:15 UTC.
* Powered OFF for RS EVA on November 25. OFF Nov. 24 about 18:30 UTC.
* Powered OFF for US EVA on November 28.
* Powered OFF for US EVA on December 01.
* Powered OFF for RS EVA on December 05.
* Capable of supporting ROS scheduled voice contacts, packet, SSTV and voice repeater ops.

The latest information on the operation mode can be found at https://www.ariss.org/current-status-of-iss-stations.html

The latest list of frequencies in use can be found at https://www.ariss.org/contact-the-iss.html

[ANS thanks Charlie Sufana, AJ9N, one of the ARISS operation team mentors, for the above information]

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"- I really enjoyed Clint’s presentation last night. The fact that he had taken the time to research and know something about his audience and welcomed interaction made it very informative and enjoyable. This was a refreshing change from many canned YouTube presentations I’ve tried to watch, which were poorly done, fuzzy video or muddy audio, or a badly prepared presenter stumbling his way through, with any valuable info lost along the way. Thanks for hooking this one up.”

Think a 75-90-minute presentation on “Working the Easy Satellites” would be appropriate for YOUR club or convention? Let me know!

Shows are scheduled for the PAPA System in Southern California, a group in Vancouver BC, and another East Coast club before Christmas."

[ANS thanks Paul Overn, KE0PBR, AMSAT Events page manager, for the above information]

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the program and the final Atlas 5 launch from Vandenberg. ULA will convert the launch pad for use by Vulcan. (ANS thanks SpaceNews for the above information)

Join AMSAT today at https://launch.amsat.org/

In addition to regular membership, AMSAT offers membership to:

* Societies (a recognized group, clubs or organization).
* Primary and secondary school students are eligible for membership at one-half the standard yearly rate.
* Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status.
* Memberships are available for annual and lifetime terms.

Contact info [at] amsat.org for additional membership information.

73 and remember to help Keep Amateur Radio in Space!

This week's ANS Editor,

Paul Stoetzer, N8HM
n8hm at amsat dot org